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UNITED STATES DEPARTMENT OF AGRICULTURE

LIST OF TECHNICAL WORKERS IN THE UNITED STATES DEPARTMENT OF AGRICULTURE

1924-1925





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LIST OF TECHNICAL WORKERS IN THE DEPARTMENT OF AGRICULTURE

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KEY TO ABBREVIATIONS

Acct., Accountant, Accounts.

Admin., Administration, Administrative, Administrator.

Agr., Agricultural, Agriculturist.

Agron., Agronomist.

Agt., Agent.

An., Animal.

Apicult., Apicultural, Apiculturist.

Arch., Architect.

Art., Artist.

Assoc., Associate, Association.

Assocs., Associations.

Asst., Assistant.

Bact., Bacteriology, Bacteriological, Bacteriologist.

Biochem. Biochemical. Biochemist.

Biol., Biological, Biologist.

Biophys., Biophysical, Biophysicist.

Bldg., Building.

Bot., Botany, Botanical, Botanist.

Chem., Chemistry, Chemist, Chemical.

Coll., College.

Collab., Collaborator.

Comn., Commission.

Comr., Commissioner.

Const., Construction.

Consult., Consulting.

Coop., Cooperation, Cooperative.

Cytol., Cytological, Cytologist. Dem., Demonstration.

Dendrol., Dendrologist.

Dep., Deputy.

Dept., Department.

Dir., Director.

Dist., District.

Div., Division.

Ecol., Ecologist.

Econ., Economic, Economics, Economist.

Ed., Editor, Editorial.

Engin., Engineer, Engineering.

Ent., Entomology, Entomological, Ento-

mologist

Erad., Eradication.

Exam., Examiner.

Exec., Executive.

Expt., Experiment.

Ext., Extension.

Fert., Fertilizers.

For., Forestry, Forester.

Gen., General.

Geol., Geologist.

Grad., Graduate.

Hdqrs., Headquarters.

Hort., Horticulture, Horticulturist.

Hubb., Husbandry, Husbandman.

Insp., Inspection, Inspector.

Instr., Instruction.

Invest., Investigations, Investigator.

Irrig., Irrigation.

Isl., Island, Islands.

Jr., Junior.

Lab., Laboratory, Laboratorian.

Libr., Librarian.

Mach., Machinery.

Manf., Manufacturing.

Mech., Mechanic, Mechanical.

Met., Meteorology, Meteorologist.

Mgr., Manager.

Mgt., Management.

Microan., Microanalysist.

Micros., Microscopist.

Misc., Miscellaneous.

Mycol., Mycologist.

Nat., Naturalist. Natl., National.

Nematol., Nematologist.

Nutr., Nutrition.

Org., Organic.

Parasitol., Parasitology, Parasitologist.

Path., Pathology, Pathological, Pathologist.

Pharm., Pharmaceutical.

Phys., Physical, Physicist.

Physiol, Physiological, Physiologist.

Pomol., Pomologist. Pred., Predatory.

Prod., Production, Products.

Pubs., Publications.

Quar., Quarantine.

Reserv., Reservation, Reservations.

Sci., Scientific, Scientist.

Secy., Secretary.

Silvicult., Silviculturist.

Sociol., Sociology.

Spec., Specialist.

Sr., Senior. Sta., Station.

Standard., Standardization.

Statis., Statistical, Statistician.

Substa., Substation.

Supt., Superintendent.

Super. Supervisor.

Tech., Technology, Technologist.

Trop., Tropical.

Univ., University.

Util., Utilization.

Vet., Veterinary.

Vit., Viticulturist.

Ward., Warden.

Zool., Zoology, Zoologist

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 - B. P. Wende, V. S., Vet., Insp. in charge, Buffalo, N. Y.

International Inspection and Quarantine:

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T. A. Bray, D. V. S., Asst. Vet., Insp. in charge, El Paso, Tex.

C. H. Canfield, D. V. M., Asst. Vet., Insp. in charge, Port Huron, Mich.

Juan Varas Catala, V. S., Vet. Insp., Insp. in charge, San Juan. P. R.

J. E. Cloud, D. V. S., Asst. Vet., Insp. in charge, San Diego, Calif.

H. H. Cohenour, M. D. V., Assoc. Vet., Insp. in charge, Bismarck, N. Dak.

W. Culbert, M. D. V., Asst. Vet., Insp. in charge, Spokane, Wash.

E. T. Davidson, D. V. M., Assoc. Vet., Insp. in charge, Athenia, N. J.

O. Fladness, D. V. M., Vet., Insp. in charge, Mexico City, Mexico.

H. A. Hedrick, D. V. S., Assoc. Vet., Insp. in charge, Baltimore, Md.

H. H. Hicks, M. D. V., Assoc. Vet., Insp. in charge, San Francisco, Calif.

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charge, Calexico, Calif.

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in charge, New York, N. Y.
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B. P. Wende, V. S., Vet., Insp. in charge, Buffalo, N. Y.

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C. J. Becker, D. V. M., Assoc. Vet., Insp. in charge, Baton Rouge, La.

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Scabies and Dourine Eradication-Con.

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J. C. Exline, D. V. M., Assoc. Vet., Insp. in charge, Olympia, Wash.

A. H. Francis, D. V. M., Asst. Vet., Acting Insp. in charge, Lincoln, Nebr.

H. Grafke, D. V. S., Assoc. Vet., Insp. in charge, Oklahoma City, Okla.

W. E. Howe, D. V. M., Assoc. Vet., Insp. in charge, Denver, Colo.

J. W. Murdoch, D. V. S., Assoc. Vet., Insp. in charge, Helena, Mont.

F. E. Murray, D. V. M., Assoc. Vet.,

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N. L. Townsend, V. M. D., Assoc. Vet.,

Insp. in charge, Topeka, Kans. J. O. Wilson, D. V. M., Assoc. Insp. in charge, Pierre, S. Dak.

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Massachusetts-E. A. Crossman, D. V. M., Assoc. Vet., Boston.

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Minnesota, W. J. Fretz, D. V. S., Vet., St. Paul.

Mississippi—L. E. Lyons, D. V. S., Asst. Vet., Jackson.

Missouri—Ralph Graham, D. V. M., Vet. Insp., Jefferson City.

Montana—J. W. Murdoch, D. V. S., Assoc. Vet., Helena.

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North Carolina—W. C. Dendinger, D. V.

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North Dakota—H. H. Cohenour, D. V. M.,

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Vet., Columbus. Oklahoma—H. Grafke, D. V. S., Assoc.

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Vet., Portland. Pennsylvania—P. E. Quinn, D. V. M.,

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South Dakota—J. O. Wilson, D. V. M.,

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Texas—L. J. Allen D. V. S. Vet. Fort

Texas—L. J. Allen, D. V. S., Vet., Fort Worth.

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Vet., Insp. in charge, Birmingham.

Arkansas—W. A. McDonald, D. V. M., Assoc. Vet., Insp. in charge, Little Rock.

Florida—S. J. Horne, D. V. M., Assoc. Vet., Insp. in charge, Jacksonville.

Field Stations-Continued.

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Mississippi—Wilbur McPherson, D. V. M., Assoc. Vet., Insp. in charge, Jackson.

North Carolina—Hartwell Robbins, D. V. S., Assoc. Vet., Insp. in charge, Washington.

Oklahoma—Harry Grafke, D. V. S., Assoc. Vet., Insp. in charge, Oklahoma City.

South Carolina—W. K. Lewis, M. D. V., Vet. Insp., Insp in charge, Columbia.

Texas—L. J. Allen, V. S., Assoc. Vet.,Insp. in charge, Fort Worth.

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A. T. Semple, B. S., Assoc. An. Husb. E. W. McComas, B. S., Asst. An. Husb. William Jackson, B. S. A., Asst. An.

Husb. Swine:

E. Z. Russell, An. Husb., in charge.

S. S. Buckley, D. V. S., M. S., Assoc. An. Husb.

O. G. Hankins, B. S., Assoc. An. Husb. J. H. Zeller, B. S., Asst. An. Husb.

Sheep:

D. A. Spencer, B. S., An. Husb., in charge.

C. G. Potts, B. S., Assoc. An. Husb.M. J. Brandon, A. B., Jr. An. Husb.

J. I. Hardy, M. S., Ph. D., Assoc. An. Husb.

Horses and Mules:

J. O. Williams, B. S. A., An. Husb., in charge.

S. R. Speelman, B. S. A., Asst. An. Husb.

Poultry:

M. A. Jull, B. S. A., M. Sc., Ph. D., Poultry Husb., in charge.

A. R. Lee, B. S., Assoc. Poultry Husb.

J. P. Quinn, Chief Sc. Aid.

S. Haynes, Chief Sc. Asst.

Animal Genetics:

Sewall Wright, M. S., Sc. D., An. Husb., in charge.

H. C. McPhee, Sc. D., Assoc. An. Husb. O. S. Eaton, M. S., Asst. An. Husb.

Nutrition:

Paul E. Howe, M. A., Ph. D., Biol. Chem., in charge.

N. R. Ellis, M. S., Assoc. Biol. Chem.

H. G. Barott, E. E., Assoc. Physicist.

W. B. Emerson, M. E., Asst. Physicist.S. J. Dahl, M. S., Jr. Chem.

Meat:

K. F. Warner, A. B., M. S., Assoc. An. Husb., Acting in charge.

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Extension:

C. D. Lowe, D. V. M., Ext. An. Husb. (in coop. with Office of Coop. Ext. Work).

Animal Husbandry Experiment Farm, Beltsville, Md. (beef cattle, swine, sheep, poultry, and horses). B. F. Brandon, B. S. A., Assoc. An. Husb., in charge.

Field Stations:

Ardmore, S. Dak. (beef cattle and swine):

F. L. Kelso, B. S. (Bur. Plant Ind.), in charge.

Big Spring, Tex. Coop. Expts. with Tex. Expt. Sta. (beef cattle):

F. E. Keating, B. S. (Bur. Plant Ind.), in charge.

Columbia, Mo. Coop. Expts. with Mo. Expt. Sta. (swine):

F. F. McKenzie, B. S. A., M. A., Agt. in An. Husb.

Dubois, Idaho. Sheep Expt. Sta.:

W. A. Denecke, B. S., Assoc. An. Husb., in charge.

J. M. Cooper, B. S., Jr. An. Husb.

Glendale, Ariz. Poultry Expt. Sta.: L. J. Pedigo, in charge.

Havre, Mont. Coop. Expts. with Mont. Expt. Sta. (beef cattle):

Geo. W. Morgan, B. S. (Bur. Plant Ind.), in charge.

Huntley, Mont. Coop. Expts. with Mont. Expt. Sta. (swine):

Dan Hansen (Bur. Plant Ind.), in charge.

Jeanerette, La. Iberia Livestock Expt. Farm. In coop. with La. Expt. Sta. (beef cattle, swine, and mules):

J. R. Quesenberry, Agt. in An. Husb., in charge.

Jonesboro, Ark. Coop. Expts. with Ark. Expt. Sta., and First Dist. Agr. School (beef cattle):

A. C. Cook, B. S., Agt. in An. Husb. (Coop.), in charge.

Laramie, Wyo. Coop. Expts. with Wyo. Expt. Sta. (horses):

E. B. Krantz, B. S. A., M. S., Asst. An. Husb., in charge.

Lewisburg, W. Va. Coop. Expts. with W. Va. Expt. Sta. (beef cattle):

R. H. Tuckwiller, B. S., Agt. in An. Husb., in charge.

Madison, Wis. Coop. Expts. with Wis. Expt. Sta.:

W. F. Dove, M. S., Agt. in An. Husb. (beef cattle).

B. L. Warwick, M. S., D. V. M., Agt. in An. Husb. (swine).

McNeill, Miss. Coastal Plain Expt. Sta. In coop. with Miss. Expt. Sta. (beef cattle, swine, and sheep):

S. W. Greene, B. A., Asst. An. Husb., in charge.

Field Stations-Continued.

Middlebury, Vt. Morgan Horse Farm
(horses and sheep):

H. H. Reese, B. S., Assoc. An. Husb., in charge.

J. A. Stoehr, B. S., Jr. An. Husb.

Miles City, Mont. Coop. Expts. with

Mont. Expt. Sta. (beef cattle, sheep,
swine, horses, and poultry):

J. W. Swartz, Farm Foreman, in charge.

A. L. Baker, B. S., Jr. An. Husb.

Newell, S. Dak. Belle Fourche Expt. Farm (swine and sheep):
Beyer, Anne, M. S., Jr. An. Husb.,

in charge. Stamford, Tex. Coop. Expts. with Tex.

Expt. Sta. (beef cattle):
V. V. Parr, B. S., Assoc. An. Husb., in

charge.

Tucumcari, N. Mex. Coop. Expts. with
N. Mex. Expt. Sta. (beef cattle):

D. R. Burnham, B. S. (Bur. Plant Ind.), in charge.

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James A. Emery, M. D., Biochem., Asst.

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Chief of Div. in charge.

W. B. Niles, D. V. M., Vet. Insp., in

charge field station, Ames, Iowa.C. N. McBryde, M. S., M. D., Ph. D., Assoc. Bact.

F. W. Tilley, A. B., M. D., Assoc. Bact. R. R. Henley, M. S., Assoc. Biochem. Henry E. Moskey, V. M. D., Asst. Vet.

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Wilmer C. Powick, B. A., Assoc. Bìochem.
George G. Snider, A. B., Sr. Sci. Aid.
Warren L. Briggs, Minor Sci. Helper.

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Jacob M. Schaffer, M. S., Asst. Chem.

Tuberculin and Mallein Production:
Asst. Chief of Div. in charge.
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Percy W. LeDuc, A. B., Jr. Chem.
Angus D. MacDonald, D. V. M., Jr. Vet.

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James Norman Taylor, M. S., Asst. Chem. Frank A. Spurr, B. S., Jr. Chem.

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Robt. J. Formad, V. M. D., M. D., Assoc.

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Gilbert T. Creech, D. V. S., Assoc. Vet. Geo. W. Stiles, M. D., Ph. D., Assoc. Bact., in charge Branch Path. Lab., Denver, Colo.

L. Enos Day, V. S., Assoc. Vet., in charge

Branch Path. Lab., Chicago, III. G. Byron Morse, M. D., Ph. D., V. S., Asst. Bact., in charge Branch Path. Lab., Omaha, Nebr.

Maude E. Starcher, Under Sci. Helper, Lab. Aid in Bact., Denver, Colo.

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Henry J. Washburn, D. V. M., Bact., Tuberculosis Invest.

John M. Buck, D. V. M., Assoc. Bact., Abortion Invest.

Warren B. Shook, V. M. D., Asst. Vet., Tuberculosis Invest.

Hubert Bunyea, D. V. S., A. B., Assoc. Vet., Poultry Diseases Invest.

L. T. Giltner, V. M. D., M. S., Assoc. Vet., Forage Poisoning and Misc. Dis-

Howard E. Smith, D. V. M., Assoc. Vet., Abortion Invest.

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Lee C. Manning, Under Sci. Helper.

Serums, Viruses, Toxins:

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Harry W. Schoening, V. M. D., Assoc. Vet., Serological Invest.

William M. Mohler, D. V. M., Jr. Vet., Serological Invest.

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Assoc. Vet., Insp. in charge. W. D. Livermore, D. V. M., Asst.

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Insp., Fostoria, Ohio.

M. E. Schwab, D. V. M., Asst. Vet., Insp., Greenfield, Ind.

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G. D. Ashley, D. V. M., Asst. Vet., Insp., Thorntown, Ind.

O. R. Conley, D. V. M., Asst. Vet., Insp., Columbus, Ohio.

B. H. Yenner, Asst. Vet., Insp., Plainfield, Ind.

R. Thumann, Asst. Vet., Insp., Zionsville, Ind.

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F. H. Schaefer, D. V. M., Asst. Vet., Insp., Marshall, Mo.

H. R. McNally, D. V. S., Asst. Vet., Insp., St. Joseph, Mo.

L. R. Rohrer, D. V. S., Asst. Vet., Insp., South St. Joseph, Mo.

Walter Boyce, D. V. M., Insp., Superior, Nebr.

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E. Combs, D. V. S., Asst. Vet., Insp., Sioux Falls, S. Dak.

Topeka, Kans .- C. B. Clement, Asst. Vet., Insp. in charge.

Westplains, Mo .- J. F. Park, Asst. Vet., Insp. in charge.

Wichita, Kans.-F. N. Elwell, D. V. M., Assoc. Vet., Insp. in charge.

G. C. Gulick, D. V. M., Asst. Vet., Insp., Hutchinson, Kans.

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Edward A. Chapin, M. S., Ph. D., Asst.

Benjamin Schwartz, A. M., Ph. D., Asst.

Eloise B. Cram, M. S., Asst. Zool.

J. E. Shillinger, D. V. M., Asst. Vet.

Marion Imes, D. V. M., M. S., Vet., External parasites, Kansas City, Kans.

H. B. Raffensperger, D. V. M., Asst. Vet., Internal parasites of swine, Chicago, Ill.

E. M. Nighbert, D. V. S., Asst. Vet., Stomach worms of sheep, Queen City, Mo.

Cooper Curtice, D. V. M., M. D., Asst. Vet., Internal parasites of sheep, Vienna, Va.

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Albert Hassall, M. R. C. V. S., Assoc. Zool.

Helen F. Moseley, A. B., Lab. Aid.

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A. J. Pistor, D. V. S., Vet., Asst. Chief.

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F. W. Meyst, D. V. S., Assoc. Vet., in charge Label Section.

G. H. Parks, Assoc. Sanitary Engin.

Robert H. Kerr, B. S., Chem., in charge Meat Insp. Lab.

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Alton, Ill.—James Johnston, V. S., M. D., Asst. Vet., Insp. in charge.

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Atlanta, Ga.—G. T. Cole, V. M. D., Asst. Vet., Insp. in charge.

Auburn, Me.—L. K. Green, V. M. D., Asst. Vet., Insp. in charge.

Augusta, Ga.—J. E. Lovejoy, D. V. S., Asst. Vet., Insp. in charge.

Austin, Minn.—E. W. Barthold, M. D. C., Asst. Vet., Insp. in charge.

Baltimore, Md.—H. A. Hedrick, D. V. S., Assoc. Vet., Insp. in charge.

Field Stations-Continued.

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Boise, Idaho.—A. J. Creely, D. V. M., Asst. Vet., Insp. in charge.

Boston, Mass.—J. F. Ryder, D. V. S., Assoc. Vet., Insp. in charge.

Bridgeport, Conn.—Fred Hern, Principal Lay Insp., in charge.

Brooklyn, N. Y.—Albert Long, M. D. V., Assoc. Vet., Insp. in charge.

Buffalo, N. Y.—B. P. Wende, V. S., Vet., Insp. in charge.

Burlington, Vt.—L. B. Whitney, D. V. S., Asst. Vet., Insp. in charge.

Butte, Mont.—Albert E. Evans, M. D. C.,
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Agent:

John W. Pace, M. S., Mobile Ala.

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OFFICE OF FOREST PATHOLOGY

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Carl P. Hartley, A. M., Ph. D., forest nursery diseases.

George G. Hedgcock, B. S., A. M., Ph. D., forest diseases.

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Charles Drechsler, M. S., Ph. D., monographs of fungi.

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Harry Bisset, sweet potato diseases.

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OFFICE OF CROP PHYSIOLOGY AND BREEDING INVESTIGATIONS

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OFFICE OF SOIL-BACTERIOLOGY INVESTIGATIONS

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Associate Physiologists:

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F. L. Goll, exhibit, motion-picture, and photomicrographic work.

Lewis T. Leonard, B. S., M. A., invest. in legume bacteria.

Assistant Biochemist:

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Junior Bacteriologist:

Franklin W. Marsh, B. S., studies in CO₂ production of soils.

Under Scientific Helper:

Samuel H. Newcomer, preparation of legume bacteria media.

OFFICE OF SOIL-FERTILITY INVESTI-GATIONS

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Edmund C. Shorey, A. M., D. Sc., humus chem.

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Associate Biochemists.

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Assistant Biochemists-Continued.

Paul R. Dawson, M. A., humus formation.

Wilbur R. Leighty, M. S., soil and plant composition.

Edward F. Snyder, B. S., soil acidity. Foreman Gardener:

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Junior Scientific Aid:

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OFFICE OF ACCLIMATIZATION AND ADAPTATION OF CROP PLANTS

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OFFICE OF DRUG AND OTHER PLANTS

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OFFICE OF AGRICULTURAL TECH-NOLOGY

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Mary Bradley, A. B., nematode invest. Edna M. Buhrer, A. B., nematode invest. Senior Laboratory Mechanic:

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Gertrude L. Power, lab. asst. in nematol. Under Scientific Helper:

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Emma F. Sirrine, M. S., seed-testing su-

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OFFICE OF CEREAL INVESTIGATIONS

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M. N .Pope, B. S. Ag., A. M., barley invest.

W. J. Sando, M. S., eastern wheat invest.
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F. E. Kempton, M. S., Ph. D., barberry eradication.

R. W. Leukel, M. S., cereal disease invest.

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OFFICE OF TOBACCO AND PLANT NUTRITION INVESTIGATIONS

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ARLINGTON EXPERIMENT FARM, ROSSLYN, VA.

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Harry D. Petheram, Forest Exam.

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Nebraska-

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Karl L. Janouch, B. S. A., Sr. Forest Planting Asst.

Black Hills-

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Wm. B. Fay, Asst. Supvr.

Fritz J. Poch, B. S. F., Jr. For.

Tarnov---

James F. Conner, Supvr., Custer, S. Dak.

Paul L. Ginter, B. S., Jr. For.

Bighorn-

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Hayden— James Blackhall, Supvr., Encampment, Wyo.

Medicine Bow-

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J. C. McCallister, B. S. F., Chief Lumberman.

D. E. Clark, B. S., Jr. For.

Henry D. Clark, B. S., Jr. For.

Shoshone-

J. N. Langworthy, Supvr., Cody, Wyo. Allan F. Miller, Jr. For.

Washakie-

Lewis R. Rist, Asst. Supvr.

DISTRICT 3-Southwestern District

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Quincy Randles, M. S. F., Dist. Forest Insp.

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Grazing:

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James A. Scott, Dist. Forest Insp.

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Roger D. Morris, B. S. F., Asst. Range Exam.

Ralph W. Hussey, B. S., Assoc. Range Exam.

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R. L. Hughes, Asst. Dist. Engin.—Roads. Public Relations:

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National Forests:

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E. G. Miller, A. B., Supvr., Flagstaff, Ariz.

John A. Adams, M. E., Asst. Supvr. H. Norton Cope, B. S., Forest Exam. National Forests-Continued.

Coronado-

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Carson-

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Gila-

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C. F. Evans, B. A., M. F., Minor roads, trails, and improvements. Thomas V. Pearson, Admin. Asst.

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Forest Management:

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J. A. Fitzwater, Asst.

U. S. Swartz, Logging Engin.

Grazing:

Ernest Winkler, Asst. Dist. For. R. D. Garver, B. S., Insp. of Grazing. J. O. Stewart, Grazing Studies.

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H. M. Shank, Maps and surveys.

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J. P. Martin, C. E., Dist. Engin .- water power.

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Kaibab-

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E. C. Shepard, B. S., Supvr., Boise, Idaho.

Arthur Potter, Asst. Supvr.

J. W. Stokes, Tech. Asst.

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Caribou-

Earl C. Sanford, B. S., Supvr., Montpelier, Idaho.

Challis-

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Lemhi-

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S. S. Stewart, Supvr, Burley, Idaho. Milo H. Deming, B. S., Grazing Exam. Payette-

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Nevada-

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J. W. Carr, Supvr., Austin, Nev.

Ashley-

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A. A. Hardy, Asst. Supvr.

Carl B. Arentson, Super., Logan,

W. C. McCormick, Asst. Super.

William B. Mace, Supvr., Cedar City, Utah.

Fishlake-

C. A. Mattsson, Supvr., Richfield, Utah. Allen C. Folster, Asst. Supvr.

LaSal-

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Uinta-

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Wasatch-

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DISTRICT 5-California District

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Operation:

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Paul P. Pitchlynn, Dist. Forest Insp .-Personnel, inspection, and improvements.

E. I. Kotok, M. S., Dist. Forest Insp.

E. H. Schmieder, Chief, maintenance.

F. D. Bowlus, B. S., Dist. Forest Insp .-Minor roads and trails.

W. A. Huestis, Supt. of Road Construction-Minor roads and trails.

Frank E. Wooldridge, Chief Surveyor-Minor roads and trails.

F. H. Hafley, Telephone Engin.

State Cooperative Fire Protection under the Weeks Law, California: E. I. Kotok, M. S., Dist. Forest Insp.

Forest Management:

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C. E. Dunston, B. F., Asst.

J. H. Price, B. S., Logging Engin.

J. R. Berry, Lumberman-Logging.

J. C. Elliott, Lumberman-Timber sales. O. M. Evans, Forest Exam .- Timber surveys.

Forest Pathology (Bureau of Plant Industry): E. P. Meineche, Ph. D., Consult. Path.

H. G. Lachmund, A. B., Asst.

Willis W. Wagener, A. B., Asst. L. S. Gill, A. B., Asst.

Frank L. Saltzman, Supt., Expt. Sta.

Forest Insect Investigations: H. E. Burke, Ph. D., Ent., Palo Alto, Calif.

J. M. Miller, Ent., Northfork, Calif.

Grazing:

Jesse W. Nelson, Asst. Dist. For. R. R. Hill, A. B., Insp. of Grazing-Grazing studies.

L. A. Barrett, Asst. Dist. For. George Miller, Dist. Forest Insp.

W. H. Friedhoff, E. M., Mineral exam.

S. B. Show, A. B., M. F., Silvicult. Duncan Dunning, M. S., Assoc. Silvicult.

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F. E. Bonner, Dist. Engin.

W. Kramer, C. E., Hydro-electrical Engin.—Water power.
S. H. Ketcham, E. M., Assoc. Hydro-

electrical Engin-Water power.

H. A. Sedelmeyer, Chief Draftsman.

S. N. Stoner, Chief Surveyor-Maps and surveys.

Don M. Hoffman, Surveyor-draftsman-Roads.

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Ashel F. Hough, B. S., Range Exam. Cleveland-

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W. G. Durbin, Supvr., Susanville, Calif. J. E. Elliott, Asst. Super.

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Modoc-

George W. Lyons, M. S., Supvr., Alturas, Calif.

Leland S. Smith, Asst. Range Exam. Orville P. Burnett, B. S., Jr. For.

Plumas-

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Geo. R. Orr, B. S., Logging Engin. John S. Everitt, B. S., M. F., Asst. For.

John C. Sammi, B. S., Jr. For.

Santa Barbara-

C. E. Jordan, Supvr., Santa Barbara, Calif.

Wm. V. Mendenhall, Asst. Supvr.

Sequoia-

F. P. Cunningham, Supvr., Porterville, Calif.

Walter E. Jotter, B. S., Asst. For.

Shasta-

J. R. Hall, B. S., M. F., Supvr., Mt. Shasta, Calif.

Belknap G. Goldsmith, B. S., M. F., Logging Engin.

Leonard F. Kellogg, B. S., Jr. For.

M. A. Benedict, B. S., Supvr., Northfork, Calif.

Roy Boothe, Asst. Supvr.

Burnett Sanford, B. S., Asst. For. J. E. Pemberton, jr., M. S., Jr. For.

Stanislaus-

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Claude K. Barker, Asst. Supvr. M. R. Brundage, B. S., Asst. For. Robert M. Riley, B. S., Jr. For.

Tahoe—
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Calif.

Robert W. Ayres, Ph. B., M. F., Asst. For.

Millard M. Barnum, Jr. For. Fred J. Dooley, Sr. Lumberman. Trinity—

B. H. Mace, Supvr., Weaverville, Calif. John T. Gray, Asst. Supvr.

Mono-

Wm. M. Maule, Supvr., Minden, Nev.

DISTRICT 6-North Pacific District

Washington and Oregon. Office, Post Office Building, Portland, Oreg.

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A. O. Waha, Asst. Dist. For.

Shirley Buck, Admin. Officer. W. B. Osborne, jr., A. B., M. F., Insp.-Fire protection.

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Inspection and Protection of Oregon and California Railroad Lands:

E. H. MacDaniels, A. B., M. F., Insp.— Fire coop.

State Cooperative Fire Protection under Weeks Law, Washington and Oregon:

E. H. MacDaniels, A. B., M. F., Insp.— Fire coop.

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Bruce E. Hoffman, B. S., Logging Engin. Geo. L. Drake, B. S. F., Lumberman.

O. F. Ericson, A. B., M. S. F., Assoc. Logging Engin.

Forest Management-Continued.

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Fred A. Matz, Chief Lumberman—Timber surveys.

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Planting and Forest Investigations:

J. F. Kümmel, M. A., Forest Exam.— Planting.

E. J. Hanzlik, B. S. F., Forest Exam.— Investigations.

Forest Pathology (Bureau of Plant Industry): John S. Boyce, B. S., M. F., Ph. D., Consult. Pathol.

Forest Insect Control:

A. J. Jaenicke, B. S. F., Forest Exam. Grazing:

E. N. Kavanaugh, Asst. Dist. For.

J. L. Peterson, B. S. H. Assoc. Range Exam.

D. C. Ingram, Assoc. Range Exam. Lands:

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Ryle Teed, Asst. Inspr.—Land exchanges. Adolph Nilsson, B. S., Chief Land Exam.

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Philip H. Dater, A. B., B. S., Dist. Eng. A. H. Hodgson, M. F., Assoc. Engin.— Maps and surveys.

Lage Wernstedt, M. E. M. F., Chief Surveyor-Maps.

Cecil A. Lord, B. S., Chief Surveyor-Roads.

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Geo. E. Griffith, Admin. Asst.

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H. E. Haefner, B. S. A., Tech. Asst.

rater-

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E. J. Fenby, Supvr., Tacoma, Wash.

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Mount Baker-

C. H. Park Supvr., Bellingham, Wash. R. L. Campbell, Asst. Supvr.

Wenatchee-

A. H. Sylvester, B. S., Supvr., Wenatchee, Wash.

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DISTRICT 7-Eastern District

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Forest Management:

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Grazing:

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Lands:

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Arkansas-Continued.

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W. N. Sloan, B. E., Chief Land Exam Pisgah—

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Supvr.
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Wichita-

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Allegheny-

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Luquillo—

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Cherokee-

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E. V. Walter, B. S., Asst. Ent.

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H. R. Painter, M. S., Asst. Ent.

W. B. Cartwright, B. S., Asst. Ent., Centralia, Ill.

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Sioux City, Iowa, Field Station (pale western cutworm, chinch bug, Hessian fly, and wheat-stem sawfly):

C. N. Ainslie, M. A., Asst. Ent., in charge.

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Kirkwood, Mo., Field Station (Hessian fly, billbugs, wheat jointworm, strawworms, and chinch bug):

A. F. Satterthwait, Assoc. Ent., in charge.

R. C. Lange, Asst. Sci. Aid.

Billings, Mont., Field Station (grasshoppers and crickets):

Stewart Lockwood, A. B., Assoc. Ent., in charge.

R. L. Shotwell, A. B., Jr. Ent.

Forest Grove, Oreg., Field Station (clover root-borer, wireworms, Hessian fly, wheat midge, plant-lice, and grasshoppers):

L. P. Rockwood, B. S., Assoc. Ent., in charge.

M. M. Reeher, A. B., Asst. Ent.

Sadie E. Keen, A. B., Jr. Ent.

M. C. Lane, B. S., Asst. Ent., Toppenish, Wash.

Carlisle, Pa., Field Station (Hessian fly and its parasites):

C. C. Hill, B. S., Asst. Ent., in charge. H. D. Smith, B. S., Jr. Ent.

Columbia, S. C., Field Station (corn earworm, southern corn rootworm, larger corn stalk-borer, and white grubs):

Philip Luginbill, A. M., Ph. D., Assoc. Ent., in charge.

John C. Shiver, B. S., Jr. Ent.

- San Antonio, Tex., Field Station (sorghum midge, grasshoppers, green bug, and southwestern corn borer):
 - C. H. Gable, B. S., Assoc. Ent., in charge.
 - L. C. Woodruff, A. B., Jr. Ent.
 - W. A. Baker, B. S., Asst. Ent., Dallas, Tex.
- Salt Lake City, Utah, Field Station (alfalfa weevil and its parasites):
 - G. I. Reeves, A. B., Assoc. Ent., in charge.
 - T. R. Chamberlin, B. S., Asst. Ent.
 - S. J. Snow, A. B., Asst. Ent.
- Charlottesville, Va., Field Station (wheat jointworm, corn earworm, and larger corn stalk-borer):
 - W. J. Phillips, M. S., Assoc. Ent., in charge.
 - A. M. Vance, B. S., Jr. Ent.
 - H. G. Burt, B. S., Jr. Ent.

European Corn Borer:

- D. J. Caffrey, B. S., Assoc. Ent., in charge of research, Arlington, Mass.
- D. W. Jones, B. S., Assoc. Ent., Arlington, Mass.
- G. W. Barber, B. S., Asst. Ent., Arlington, Mass.
- B. E. Hodgson, B. S., Asst. Ent., Arlington, Mass.
- W. G. Bradley, B. S., Asst. Ent., Arlington, Mass.
- W. D. Whitcomb, B. S., Asst. Ent., Arlington, Mass.
- R. C. Ellis, Jr. Ent., Arlington, Mass.
- K. W. Babcock, B. S., Asst. Ent., Hyères, Var, France.
- H. N. Bartley, B. S., Asst. Ent., in charge field sta., Silver Creek, N. Y.
- L. B. Scott, B. S., Jr. Ent., Silver Creek, N. Y.
- F. W. Poos, A. M., Asst. Ent., in charge field sta., Sandusky, Ohio.
- L. H. Patch, B. S., Jr. Ent., Sandusky, Ohio.
- W. R. Thompson, M. S., D. Sc., Ent., in charge parasite field sta., Hyères, Var, France.
- H. L. Parker, B. S., D. Sc., Asst. Ent., Hyères, Var, France.
- L. H. Worthley, Administrator in Corn Borer Control, Arlington, Mass.
- R. A. Vickery, A. M., Asst. Ent., Arlington, Mass.
- C. W. Lewis, B. S., Prin. Sci. Aid, Arlington, Mass.
- G. P. Babson, Sr. Sci. Aid., Arlington, Mass.
- T. M. Cannon, Sci. Aid., Arlington, Mass.
- F. S. Vidler, Sci. Aid., Arlington, Mass.
 E. G. Brewer, Sr. Admin. Asst., in charge field sta., Cleveland, Ohio.
- Adonis A. Mathewson, B. S., Asst. Ent., Cleveland, Ohio.

European Corn Borer-Continued.

- Curtis Benton, M. S., Jr. Ent., Cleveland, Ohio.
- C. O. Larrabee, Prin. Sci. Aid, Cleveland, Ohio.
- J. W. Enwright, Sr. Sci. Aid, Cleveland, Ohio.
- F. L. Fall, Sr. Sci. Aid, Cleveland, Ohio. C. E. Towle, Prin. Sci. Aid, Elyria, Ohio.

SOUTHERN FIELD-CROP INSECTS

- W. D. Hunter, M. S., LL. D., Sr. Ent., in charge, Houston, Tex.
- J. L. Webb, M. S., Assoc. Ent., acting in charge, Washington, D. C.
- H. B. Bradford, Chief Sci. Illustr.
- G. L. Garrison, Sr. Sci. Aid.
- Janet W. Armstrong, Under Sci. Helper. Cotton Insects:
- B. R. Coad, B. S., Ent., in charge, Tallulah, La.
 - J. W. Folsom, Sc. B., Sc. D., Assoc. Ent.
 - F. H. Tucker, Assoc. Chem.
 - G. A. Maloney, Asst. Ent.
- W. S. Cook, M. A., Asst. Sci. (plant morph.).
- T. P. Cassidy, B. S., Asst. Ent.
- F. F. Bondy, B. S., Asst. Ent.
- M. T. Young, B. S., Asst. Ent.
- R. C. Gaines, B. S., Asst. Ent.
- A. J. Chapman, B. S., Jr. Ent.
- G. L. Smith, B. S., Jr. Ent.
- V. V. Williams, B. S., Jr. Ent.
- H. C. Young, B. S., Jr. Ent..
- W. A. Stevenson, B. S., Jr. Ent.
- P. A. Glick, A. B., M. S., Jr. Plant Quar. Insp.
- G. M. Armstrong, M. A., Ph. D., Agt., in charge substa., Florence, S. C.
- F. A. Fenton, M. A., Ph. D., Ent., Florence, S. C.
- R. W. Moreland, B. S., Asst. Ent., Florence, S. C.
- E. W. Dunnam, B. S., Asst. Ent., Florence, S. C.
- T. C. Barber, B. S., Asst. Ent., Brownsville, Tex.

Tobacco Insects:

- A. C. Morgan, B. S., Assoc. Ent., in charge, Clarksville, Tenn.
- S. E. Crumb, B. S., Assoc. Ent.
- K. B. McKinney, B. S., Asst. Ent.
- J. U. Gilmore, B. S., Asst. Ent.
- J. N. Tenhet, B. S., Jr. Ent.
- F. S. Chamberlin, B. S., Asst. Ent., Quincy, Fla.

Sugarcane and Rice Insects:

- T. E. Holloway, B. S., Assoc. Ent., in charge, New Orleans, La.
- W. E. Haley, Prin. Sci. Aid.
- J. W. Ingram, B. S., Jr. Ent., Crowley, La.

FOREST INSECTS

F. C. Craighead, B. A., M. S., Ph. D., Ent., in charge.

Western Bark-Beetles:

J. M. Miller, B. S., Ent., in charge field sta., Palo Alto, Calif., and substa., Northfork, Calif.

J. C. Evenden, B. S., Assoc. Ent., in charge field sta., Coeur d'Alene, Idaho.
 H. E. Burke, M. S., Ph. D., Assoc. Ent.,

Palo Alto, Calif.

W. D. Edmonston, Assoc. Ent., field sta., Kanab, Utah.

F. P. Keen, B. S., Assoc. Ent., Palo Alto, Calif.

H. L. Person, M. S., Jr. Ent., Palo Alto, Calif.

J. E. Patterson, Asst. Ent., Palo Alto, Calif., in charge substa., Ashland, Oreg.

H. J. Rust, Sr. Sci. Aid, Coeur d'Alene, Idaho.

George Hofer, Sr. Sci. Aid, Kanab, Utah. Albert Wagner, Sr. Sci. Aid, Palo Alto, Calif.

E. A. Morrow, Asst. Sci. Aid, Palo Alto, Calif.

W. J. Buckhorn, Asst. Sci. Aid, Palo Alto, Calif.

Forest-Tree Insects:

R. A. St. George, M. S., Asst. Ent., in charge field sta., East Falls Church, Va.

S. A. Graham, B. S., M. F., Ph. D., agt., in charge field sta., St. Paul, Minn.

H. J. MacAloney, M. F., B. S., Asst. Ent., in charge field sta., Amherst, Mass. Forest-Product Insects:

T. E. Snyder, B. A., M. F., Ph. D., Ent. Shade-Tree Insects:

William Middleton, B. A., Asst. Ent. Forest Coleoptera:

A. G. Boving, B. Ph., M. S., Ph. D., Ent.

TRUCK-CROP INSECTS

J. E. Graf, A. B., Ent., in charge. W. H. White, B. S., Assoc. Ent. Mary C. Foley, Asst. Sci. Illustr. Truck-Crop Insecticides:

C. H. Popenoe, B. S., Assoc. Ent.

Taxonomy of Truck-Crop Insects: F. H. Chittenden, Sc. D., Ent. Doris H. Blake, A. M., Jr. Ent. Miscellaneous Truck-Crop Insects:

R. E. Campbell, B. S., Assoc. Ent., in charge field sta., Alhambra, Calif.

J. C. Elmore, B. S., Jr. Ent., Alhambra, Calif.

C. E. Smith, M. S., Asst. Ent., in charge field sta., Baton Rouge, La.

Norman Allen, B. S., Jr. Ent., Baton Rouge, La.

W. A. Thomas, B. S., Jr. Ent., in charge field sta., Chadbourne, N. C.

W. J. Reid, Jr., B. S., Jr. Ent., Chadbourne, N. C.

Misellaneous Truck-Crop Insects-Con.

D. E. Fink, M. S., Ph. D., Asst. Ent., in charge field sta., Riverton, N. J.

David Dunavan, B. S., Agt., Toppenish, Wash.

Sugar-Beet Leafhopper:

Walter Carter, M. S., Asst. Ent., Toppenish, Wash.

Sweet Potato Weevil Control:

B. L. Boyden, B. S., Assoc. Ent., in charge field sta., Tampa, Fla.

Wm. H. Merrill, Sr. Sci. Aid, Tampa, Fla.

W. E. Stone, B. S., Jr. Ent., Maclenny, Fla.

J. W. McGlamery, B. S., Jr. Ent, Maclenny, Fla.

W. M. Prevatt, Agt., Maclenny, Fla.

S. H. Rountree, Agt., Plant City, Fla. K. L. Cockerham, M. S., Assoc. Ent., in

K. L. Cockerham, M. S., Assoc. Ent., in charge field sta., Biloxi, Miss.

F. A. Wright, B. S., B. A., Jr. Ent., Bay St. Louis, Miss.

J. A. McLemore, B. S., Jr. Ent., Picayune, Miss.

W. M. Mingee, B. S., Jr. Ent., Picayune, Miss.

Troy Thompson, B. S., Jr. Ent., Waveland, Miss.

S. C. Brummitt, Sr. Sci. Aid, in charge field sta., Silverhill, Ala.

Tomato Weevil:

M. M. High, B. S., Assoc. Ent., in charge field sta., Gulfport, Miss.

Pea Aphis:

J. E. Dudley, Jr., Assoc. Ent., in charge field sta., Madison, Wis.

E. M. Searls, Sr. Sci. Aid, Madison, Wis.

T. E. Bronson, Jr. Sci. Aid, Madison, Wis.

Mexican Bean Beetle:

N. F. Howard, M. S., Assoc. Ent., in. charge field sta., Birmingham, Ala.

L. W. Brannon, B. S., Jr. Ent., Birmingham, Ala.

Wallace Coleman, A. B., M. S., Jr. Ent., Birmingham, Ala.

Rodney Cecil, B. S., Jr. Ent., Geneva, N. Y.

J. R. Douglass, M. S., Asst. Ent., in charge field sta., Estancia, N. Mex.

BEE CULTURE

J. I. Hambleton, B. S., Apicult., in charge. Bee Diseases:

A. P. Sturtevant, A. B., Ph. D., Assoc. Apicult.

Behavior of Bees:

W. J. Nolan, A. M., Assoc. Apicult.

Beekeeping Regions:

E. L. Sechrist, B. A., Assoc. Apicult.

Physiology of Bees:

G. W. Bulger, M. A., Ph. D., Asst. Apicult.

STORED-PRODUCT INSECTS

(Including household insects)

E. A. Back, B. S., Ph. D., Ent., in charge.

R. T. Cotton, M. S., Ph. D., Ent.

Sibyl McDonald, Sci. Illustr. Marion T. Van Horn, Jr. Sci. Aid.

Grain Insects:

Perez Simmons, B. S., Assoc. Ent., in charge field sta., Silver Spring, Md.

S. E. McClendon, B. S., Asst. Ent., in charge field sta., Thomasville, Ga. G. W. Ellington, B. S., Jr. Ent., Silver

Spring, Md.

Bean Weevils:

A. O. Larson, M. S., Assoc. Ent., in charge field sta., Alhambra, Calif.

C. K. Fisher, B. S., Jr. Ent., Alhambra, Calif.

Dried-Fruit Insects:

J. C. Hamlin, M. S., Assoc. Ent., in charge field sta., Fresno, Calif.

W. D. Reed, B. S., Asst. Ent., Fresno, Calif.

Fumigation Experiments:

E. A. Vaughan, B. S., Jr. Ent., Silver Spring, Md.

INSECTS AFFECTING THE HEALTH OF MAN AND ANIMALS

(Under immediate direction of the chief of bureau)

W. D. Hunter, M. S., LL. D., Sr. Ent., Houston, Tex.

J. L. Webb, M. S., Assoc. Ent.

Insects Affecting Health of Animals:

F. C. Bishopp, B. S., Ent., in charge, Dallas, Tex.

E. W. Laake, B. S., Asst. Ent.

H. M. Brundrett, B. S., Asst. Ent.

W. E. Dove, B. S., Asst. Ent.

O. G. Babcock, B. S., Asst. Ent., Sonora,

D. C. Parman, B. S., Asst. Ent., Uvalde, Tex.

Malaria Mosquitoes:

W. V. King, B. S., Ph. D., Assoc. Ent., in charge, Mound, La.

G. H. Bradley, B. S., Asst. Ent.

H. E. Wallace, B. S., Jr. Ent.

T. E. McNeel, B. S., Jr. Ent.

GIPSY MOTH AND BROWN-TAIL MOTH

A. F. Burgess, M. S., Sr. Ent., in charge, Melrose Highlands, Mass.

S. S. Crossman, B. S., Ent.

H. B. Dalton, Admin. Asst.

W. N. Dovener, Chief Sci. Illustr.

Field and Laboratory Research:

C. W. Collins, M. S., Assoc. Ent.

T. II. Jones, B. S., Assoc. Ent.

J. N. Summers, B. S., Ph. D., Assoc. Ent.

C. F. W. Muesebeck, B. S., Assoc. Ent.

R. T. Webber, Asst. Ent.

C. W. Minott, B. S., Asst. Ent.

Field and Laboratory Research-Continued.

S. M. Dohanian, B. S., M. F., Asst. Ent. M. T. Smulyan, B. S., Ph. D., Asst. Ent.

C. E. Hood, B. S., Asst. Ent.

D. F. Barnes, B. S., Asst. Ent. P. B. Dowden, B. S., Jr. Ent.

J. C. Silver, B. S., Jr. Ent.

W. F. Sellers, B. S., Jr. Ent.

J. V. Schaffner, jr., Prin. Sci. Aid.

R. Wooldridge, Sr. Sci. Aid.

A. W. Young, Sr. Sci. Aid.

H. I. Winchester, Sr. Sci. Aid.

J. E. R. Holbrook, Sr. Sci. Aid.

J. A. Millar, Sci. Aid.

C. L. Griswold, Asst. Sci. Aid.

Scouting and Extermination (headquarters at Melrose Highlands, Mass.):

H. L. Blaisdell, Sr. Admin. Asst.

Saul Phillips, Chief Sci. Aid.

L. E. Gibson, B. S., Prin. Sci. Aid. H. N. Bean, Sr. Sci. Aid.

F. W. Foster, Sr. Sci. Aid.

I. T. Guild, Sr. Sci. Aid.

C. A. McIsaac, Sr. Sci. Aid.

D. G. Murphy, Sr. Sci. Aid.

W. W. Bancroft, Sr. Sci. Aid.

W. A. Collins, Sr. Sci. Aid.

H. A. Ames, Chief Sci. Aid, Bound Brook. N. J.

C. T. Davis, Sr. Sci. Aid, Bound Brook, N. J.

F. W. Graham, Sr. Sci. Aid, Bound Brook, N. J. W. J. Nestle, Sr. Sci. Aid, Bound Brook,

N. J.

J. A. Priest, Sr. Sci. Aid, Bound Brook, N. J.

Quarantine and Inspection:

D. M. Rogers, Jr. Admin. officer, in charge, Boston, Mass.

F. W. Graves, jr., Prin. Sci. Aid.

W. J. Ahearn, Sci. Aid.

I. L. Bailey, Sci. Aid.

P. S. Coffin, Sci. Aid.

C. M. Emerson, Sci. Aid.

M. H. Feeney, Sci. Aid.

G. J. Galvin, Sci. Aid.

D. Harrington, Sci. Aid.

J. Keefe, Sci. Aid.

F. L. Keene, Sci. Aid.

R. W. Kennedy, Sci. Aid.

J. F. Keough, Sci. Aid.

J. F. McDevitt, Sci. Aid.

C. A. Manchester, Sci. Aid.

P. H. Meagher, Sci. Aid.

G. A. Miller, Sci. Aid.

J. F. Murray, Sci. Aid.

I. B. Newbegin, Sci. Aid.

L. H. Noble, Sci. Aid.

J. J. Roach, Sci. Aid.

W. Sarsfield, Sci. Aid.

W. A. Shinkwin, Sci. Aid.

A. C. Ward, Sci. Aid.

INSECT PEST SURVEY

J. A. Hyslop, M. S., Ent., in charge.

TAXONOMY

S. A. Rohwer, Ent., in charge.
Eleanor T. Armstrong, Sr. Sci. Illustr.
Francis H. Noyes, Asst. Sci. Illustr.
C. S. Menagh, Sci. Ajd.
Edna E. Sellens, Jr. Sci. Aid.
Mildred B. Everhart, Under Sci. Helper.
Nettie E. Crocker, Under Sci. Helper.
Eunice Myers, Under Sci. Helper.
Catherine V. Locke, Under Sci. Helper.
Nellie D. McConnell, Under Sci. Helper.
Louie H. Richardson, Under Sci. Helper.
Janice R. Keyser, Under Sci. Helper.
Coieoptera:

E. A. Schwarz, Ph. D., Ent. W. S. Fisher, Asst. Ent. H. S. Barber, Asst. Ent.

Lepidoptera:

Wm. Schaus, M. A., D. Sc., Assoc. Ent. Carl Heinrich, Assoc. Ent. August Busck, Assoc. Ent. Hymenoptera:

A. B. Gahan, M. S., Assoc. Ent.

R. A. Cushman, Assoc. Ent. L. H. Weld, M. A., Asst. Ent.

Diptera:

C. T. Greene, Asst. Ent. R. C. Shannon, B. S., Jr. Ent.

Orthoptera and Neuroptera:

A. N. Caudell, M. S., Assoc. Ent.

Ectoparasites and Mites:
H. E. Ewing, M. A., Ph. D., Assoc. Ent.

BIOCLIMATICS

A. D. Hopkins, Ph. D., Sr. Ent., in charge, Mineral Wells, W. Va.

M. A. Murray, Asst. Sci. Aid, Mineral Wells, W. Va.

INSECT PATHOLOGY

G. F. White, B. S., Ph. D., M. D., Path., in charge.

BUREAU OF BIOLOGICAL SURVEY

E. W. Nelson, M. A., D. Sc., Chief Biol., Chief.

W. C. Henderson, LL. B., Sr. Admin. Officer, Asst. Chief.

A. B. Morrison, Sr. Admin. Asst., Asst. to Chief.

E. J. Thompson, LL. M., Sr. Admin. Asst., Asst. in Operations.

W. H. Cheesman, Ph. B., Asst. Ed.

GAME AND BIRD RESERVATIONS

Smith Riley, Sr. Admin. Asst., in charge. Big-Game Preserves:

F. H. Rose, Warden Mont. Natl. Bison Range, Moiese, Mont.

F. M. Dille, Warden Niobrara Reserv., Valentine, Nebr.

A. P. Chambers, Warden Wind Cave Natl. Game Freserve, Hot Springs, S. Dak.

A. P. Nelson, Warden Elk Refuge, Jackson, Wyo.

W. D. Parker, Warden Sullys Hill Natl. Game Preserve, Fort Totten, N. Dak. Bird Refuges:

D. H. Stevenson, Warden Aleutian Islands Reserv., Unalaska, Alaska.

L. L. Bryan, Warden Big Lake Reserv., Ark., Hornersville, Mo.

Ludwig Bethel, Warden Key West and Tortugas Keys Reserv., Key West, Fla.

B. J. Pacetti, Warden Mosquito Inlet Reserv., Ponce Park, Fla.

Paul Kroegel, Warden Pelican Island Reserv., Sebastian, Fla.

Harold P. Bennett, Warden Tampa Bay Group of Refuges, St. Petersburg, Fla. Bird Refuges-Continued.

G. P. Wilder, Warden Hawaiian Islands Reserv., Honolulu, Hawaii.

C. F. Gleason, Warden Minidoka Reserv., Rupert, Idaho.

C. H. Dexter, Warden Nine Pipe Reserv., Ronan, Mont.¹

F. C. Mayer, Warden Pablo Reserv., Pablo, Mont.¹

M. C. Marvin, Warden Willow Creek Reserv., Great Falls, Mont.²

W. R. Jones, Warden North Platte Reserv., Minatare, Nebr.¹

L. E. Foster, Warden Carlsbad Reserv., Carlsbad, N. Mex.

H. C. Holcomb, Asst. Warden Carlsbad Reserv., Lakewood, N. Mex.¹

James P. Middleton, Asst. Warden Carlsbad Reserv., Carlsbad, N. Mex.²

C. L. Grow, Warden Rio Grande Reserv., Engle, N. Mex.¹

L. E. Hibbard, Supvr. Lake Malheur Reserv., Burns, Oreg.

G. M. Benson, Warden Lake Malheur Reserv., Voltage, Oreg.

G. M. Wilson, Warden Belle Fourche Reserv., Belle Fourche, S. Dak.

¹ Cooperative warden; Reclamation Service employee.

² Employed part of year only.

Bird Refuges-Continued.

- W. L. Whittemore, B. S., Warden Strawberry Valley Reserv., Provo, Utah.¹
- C. M. Conger, Warden Conconully Reserv., Conconully, Wash.
- H. E. Coffin, Warden Blackbeard Island Reserv., Sapelo, Ga.²
- Octavius Hopkins, Asst. Warden Blackbeard Island Reserv., Sapelo, Ga.2
- C. H. Swearingen, Asst. Warden Blackbeard Island Reserv., Sapelo, Ga.²
- John F. Casey, Asst. Warden Blackbeard Island Reserv., Sapello, Ga.²

FOOD HABITS RESEARCH

W. L. McAtee, M. A., Biol., in charge.
Relation of Native and Introduced Birds and
Other Animals to Agriculture:

E. R. Kalmbach, Biol.

Remington Kellogg, M. A., Assoc. Biol.

- J. R. Malloch, A. B., Assoc. Biol.
- L. L. Buchanan, A. B., Asst. Biol.
- C. C. Sperry, A. B., Asst. Biol.

F. M. Uhler, A. B., Jr. Biol.

Economic Investigations of Migratory Birds: E. R. Kalmbach, Biol.

C. C. Sperry, A. B., Asst. Biol.

Quail Investigations (in cooperation with committee representing Quail Study Fund for Georgia and Florida) (Hdqrs. Beachton, Ga.):

H. L. Stoddard, Field Asst., in charge.C. O. Handley, B. S., Field Asst.

FUR RESOURCES

F. G. Ashbrook, A. B., Biol., in charge.
K. B. Hanson, A. B., D. V. M. Assoc. Biol., Experimental Fur Farm, Saratoga Springs, N. Y.

ECONOMIC INVESTIGATIONS

A. K. Fisher, M. D., Sr. Biol., in charge.
W. B. Bell, M. S., Ph. D., Biol., Asst. in charge.

Lisle Morrison, Sr. Admin. Asst.

Eradication Methods (laboratory, Denver, Colo.):

S. E. Piper, B. S., Assoc. Biol., Leader.

E. E. Horn, Asst. Biol.

H. E. Williams, Asst. Biol.

F. E. Garlough, A. B., Assoc. Biol.; Berkeley, Calif.

Destruction of Predatory Animals (in cooperation with States):

- J. S. Ligon, Asst. Admin. Officer; Albuquerque, N. Mex.
- M. E. Musgrave, Asst. Admin. Officer, Leader Ariz. dist.; Phoenix.
- O. L. Coleman, Sr. Admin. Asst.; Phoenix.
- C. G. Poole, Asst. Admin. Officer, Leader Calif. dist.; Sacramento.

- Destruction of Predatory Animals-Con.
 - R. K. Stewart, Sr. Admin. Asst.; Sacramento.
 - S. P. Young, B. S., Asst. Admin. Officer, Leader Colo. dist.; Denver.
 - J. W. Crook, Sr. Admin. Asst.; Monte Vista.
 - G. M. Trickel, Sr. Admin. Asst.; Mont-
 - L. J. Goldman, Asst. Admin. Officer, Leader Idaho dist.; Gooding.
 - Samuel Driggs, Sr. Admin. Asst.; Sho-shope
 - Leo Twitchell, Admin. Asst.; Dubois.
 - R. E. Bateman, Asst. Admin. Officer, Leader Mont. dist.; Billings.
 - L. L. Thompson, Sr. Admin. Asst.; Billings.
 - E. R. Sans, Asst. Admin. Officer, Leader Nev. dist.; Reno.
 - A. L. Rasmussen, Sr. Admin. Asst.; Reno.
 - E. F. Pope, Asst. Admin. Officer, Leader N. Mex. dist.; Albuquerque.
 - E. L. Pineau, Sr. Admin. Asst.; Albuquerque.
 - W. A. Mullins, Sr. Admin. Asst.; Albuquerque.
 - S. G. Jewett, Asst. Admin. Officer, Leader Oreg. dist.; Portland.
 - R. T. Jackson, Sr. Admin. Asst.; Portland.
 - Elmer Williams, Sr. Admin. Asst.; Portland.
 - Louis Knowles, Asst. Admin. Officer, Leader S. Dak. dist.; Rapid City.
 - C. R. Landon, Asst. Admin. Officer, Leader Tex. dist.; San Antonio.
 - G. E. Holman, Asst. Admin. Officer, Leader Utah dist.; Salt Lake City.
 - E. Rasmussen, Sr. Admin. Asst.; Salt Lake City.
 B. B. Turner, Sr. Admin. Asst.; Salt
 - Lake City.
 G. R. Bach, D. V. S., Asst. Admin.
 - Officer, Leader Wash. dist.; Olympia.

 H. W. Dobyns, Sr. Admin. Asst.: Olympia.
 - H. W. Dobyns, Sr. Admin. Asst.; Olympia.
 - C. J. Bayer, Asst. Admin. Officer, Leader Wyo. dist.; Cheyenne.
 - H. P. Williams, Sr. Admin. Asst.; Sheridan.
- Destruction of Injurious Rodents (in cooperation with States):
 - James Silver, Asst. Biol., Leader Eastern dist.; Washington, D. C.
 - F. N. Jarvis, Asst. Biol. Aid; Washington, D. C.
 - M. A. Stewart, B. S., Jr. Biol.; Ithaca, N. Y.
 - G. C. Oderkirk, B. S. A., Asst. Biol.; Lafayette.
 - D. A. Gilchrist, Asst. Biol., Leader Ariz. dist.; Phoenix.
 - B. E. Foster, Jr. Biol.; Phoenix.

¹ Cooperative warden; Reclamation Service employee.

² Cooperative warden.

Destruction of Injurious Rodents-Con.

C. E. Reno, Jr. Biol.; Phoenix.

Joseph Keyes, Asst. Biol., Leader Calif. dist.; Sacramento.

H. G. Hansen, Jr. Biol.; Sacramento.

L. L. Laythe, B. S., Asst. Biol., Leader Colo. dist.; Denver.

D. D. Green, B. S., Jr. Biol.; Denver.

W. E. Crouch, B. S. A., Asst. Biol., Leader Idaho dist.; Boise.

T. B. Murray, Jr. Biol.; Pocatello. Paul Quick, Asst. Biol. Aid; Boise.

A. E. Oman, B. S., M. F., Asst. Biol.,

Leader Kans. dist.; Manhattan. Roy Moore, Asst. Biol. Aid; Manhattan.

O. E. Stephl, B. S., Asst. Biol., Leader Mont. dist.; Bozeman.

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H. H. T. Jackson, M. A., Ph. D., Biol.

H. C. Oberholser, M. S., Ph. D., Biol.

W. P. Taylor, B. S., Ph. D., Biol.; Tucson, Ariz.

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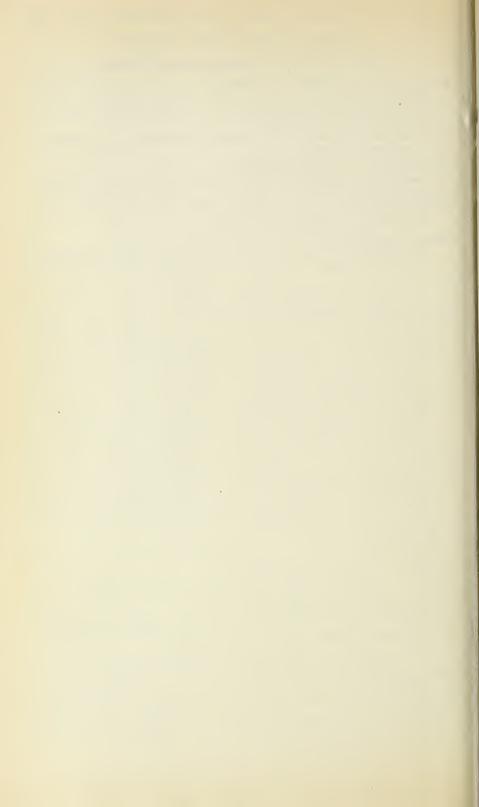
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